# APPLICATIONS BEING PREPARED

Philip Morris Incorporated
Privileged and Confidential

**1 July 1981**

Code 1 - Offensive/Urgent
Code 2 - Defensive/Urgent
Code 3 - Offensive/Normal
Code 4 - Defensive/Normal

ϕ0000016058

Source: https://www.industrydocuments.ucsf.edu/docs/tbbj0000

## 774 EXPANDED, STIFFENED STEMS

N. Rainer and D. Siwiec
Tobacco Materials/Burns/Gannon

An improved process for expanding tobacco wherein tobacco components such as stems, midribs and veins are contacted with an alkaline-hydrogen peroxide solution to effect expansion, washed and then dried and/or roasted to produce an expanded tobacco material highly suitable for use in smoking products. Prior to contact with the alkaline hydrogen peroxide solution, the tobacco materials are subjected to a pretreatment step with a multivalent salt solution to present clumping and/or interadherence of the tobacco shreds which would otherwise occur during the drying step.

Related to 791, 983, 797

FILED Palmer (Hutcheson) to be reassigned
CODE I

| | |
|---|---|
| 4-30-77 | Disclosure received. |
| 10-14-77 | Literature search requested. |
| 10-14-77 | Rainer's comments on prior art received. |
| 11-21-77 | Search completed. |
| 2-78 | Preparation of application begun. |
| 7-78 | Completion report received from inventors. |
| 8-79 | Inventors have indicated that additional data from pilot plant expansion studies will be completed by the end of September. |
| 3-10-80 | 797 combined herewith. |
| 3-16-80 | First draft almost complete. Plan to submit to inventors by end of April. |
| 5-11-80 | Draft of text given to inventor for review. Inventor returned draft and indicated that additional examples will be available shortly. |
| 6-30-80 | Revised draft and examples nearly completed. Inventor continues to generate new data for incorporation in application. |
| 7-23-80 | Discussed this application with Gillis and Rainer in view of PM 791. Because of related subject matter, 791 will be incorporated in 774 and the final application will be completed by SAH. A separate application will be filed to cover the more recent improvements generated by Rainer. |
| 8-1-80 | 791 combined herewith. |
| 8-6-80 | Redraft completed--to Rainer for review. |
| 8-15-80 | Rainer's comments received--final draft completed. |
| 8-15-80 | Draft revised in view of changes and comments. |
| 11-5-80 | Final draft completed--to inventors for review. |
| 11-10-80 | Final draft to management for review. |
| 12-15-80 | Inventors/management comments received. |
| 1-16-81 | Application being prepared for filing. |
| 4-10-81 | PM 774, 797 (both completed), and 791 will be filed with PM 983 upon completion thereof. |
| 6-22-81 | Executed and mailed to PTO. |

ϕ00016059



Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

## 791 EXPANSION PROCESS FOR UNCURED TOBACCO

N. Rainer, G. Bokelman, J. Hearn
Tobacco Materials/Burns/Gannon

Homogenized green tobacco leaf and/or stem are incubated at about 40° C for 20 hours in the presence of a flow of air. The homogenized leaf cured (hereinafter HLC) is then treated with an alkaline hydrogen peroxide solution followed by washing. The expanded HLC is roasted at about 200° C to achieve a 5% weight loss. the resultant HLC has a significantly increased filling capacity, improved appearance and smoking qualities.

Related to 774, 983, 797

INACTIVE Hutcheson
CODE 3

| | |
|---|---|
| 10-14-77 | Disclosure received. |
| 11-77 | Search completed. |
| 7-78 | Completion report received from inventors. |
| 9-11-79 | Search requested from outside firm. |
| 10-15-79 | Search received; results being evaluated. |
| 2-8-80 | Memo from Gannon re status. |
| 3-13-80 | Disclosure to WLKT for application preparation. |
| 6-20-80 | Gillis preparing draft. |
| 7-23-80 | As a result of discussion with T. Gillis. Application will be pursued by Hutcheson. |
| 8-13-80 | Memo to Rainer requesting more info. |
| 1-16-81 | Inventor Bokelman supplied information on HCL process; will prepare application to be filed with related cases 774, 797 and 983. |
| 4-10-81 | PM 774, 797 (both completed), and 791 will be filed with PM 983 upon completion thereof. |
| 6-18-81 | Inactivated. |

* * * * *

0000016060

Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

797 PROCESS FOR INCREASING THE FILLING POWER OF TOBACCO STEM MATERIAL (OZONE PRETREATMENT)

N. Rainer and D. Siwiec
Tobacco Materials/Burns/Gannon

An improved process for expanding tobacco wherein tobacco components such as stems, midribs and veins are contacted with an alkaline-hydrogen peroxide solution to effect expansion, washed and then dried and/or roasted to produce an expanded tobacco material highly suitable for use in smoking products. Prior to contact with the alkaline hydrogen peroxide solution, the tobacco materials are subjected to a pretreatment step with a multivalent salt solution to present clumping and/or interadherence of the tobacco shreds which would otherwise occur during the drying step.

Related to 791, 797, 983

FILED Palmer (Hutcheson) to be reassigned
CODE I

| | |
|---|---|
| 4-30-77 | Disclosure received. |
| 10-14-77 | Literature search requested. |
| 10-14-77 | Rainer's comments on prior art received. |
| 11-21-77 | Search completed. |
| 2-78 | Preparation of application begun. |
| 7-78 | Completion report received from inventors. |
| 8-79 | Inventors have indicated that additional data from pilot plant expansion studies will be completed by the end of September. |
| 3-10-80 | 797 combined herewith. |
| 3-16-80 | First draft almost complete. Plan to submit to inventors by end of April. |
| 5-11-80 | Draft of text given to inventor for review. Inventor returned draft and indicated that additional examples will be available shortly. |
| 6-30-80 | Revised draft and examples nearly completed. Inventor continues to generate new data for incorporation in application. |
| 7-23-80 | Discussed this application with Gillis and Rainer in view of PM 791. Because of related subject matter, 791 will be incorporated in 774 and the final application will be completed by SAH. A separate application will be filed to cover the more recent improvements generated by Rainer. |
| 8-1-80 | 791 combined herewith. |
| 8-6-80 | Redraft completed--to Rainer for review. |
| 8-15-80 | Rainer's comments received--final draft completed. |
| 8-15-80 | Draft revised in view of changes and comments. |
| 11-5-80 | Final draft completed--to inventors for review. |
| 11-10-80 | Final draft to management for review. |
| 12-15-80 | Inventors/management comments received. |
| 1-16-81 | Application being completed for filing. |
| 4-10-81 | PM 774, 797 (both completed), and 791 will be filed with PM 983 upon completion thereof. |
| 6-22-81 | Executed and mailed to PTO. |

0000016061

* * * * *

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

829 ON-LINE QUANTITATION OF PLASTICIZER IN FILTER RODS

D. Watson and W. Harvey
Analytical Research/Bourlas/Farone/Lowitz

The device would provide for measurement of absorbed energy at selected microwave frequencies as this energy is directed through the filter rods on a maker. These measurements, once calibrated against plasticizer content of the filter material, would be used through a feedback circuit to control the amount of plasticizer added.

Related to 877.

Sarofeen
CODE 4

| | |
|---|---|
| 4-24-78 | Disclosure received. |
| 8-18-78 | This device functions similarly to very close art in-house and in a prior art reference. Under advisement pending further development. |
| 1-80 | This case will be reevaluated in view of Steinbrecher case which should be filed soon. |
| 3-7-80 | Disclosure sent to WLKT for application preparation. |
| 4-17-80 | Torrente visit scheduled. |
| 6-17-80 | Discussed with Torrente. |
| 8-21-80 | Asked inventors for more info in order to proceed with application. |
| 1-15-81 | Info not received to date. |
| 3-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | Recommend sending to F&N ASAP. |
| 6-24-81 | Being prepared to send to F&N. |

* * * * *

2909160062

Source: https://www.industrydocuments.ucsf.edu/docs/tbbj0000

835 IMPROVED FLAVOR FOR RECONSTITUTED TOBACCO

D. Keel
Flavor Development/Daylor/Meyer

In the manufacture of reconstituted tobacco by the paper-made process, in which the solubles are concentrated and returned to the sheet, it was found that the addition of ammonia to the solubles either with or without heat and/or with or without other additives before recombination with the sheet resulted in an improved flavor of the product making it more tobacco-like.

Palmer (Hutcheson)/to be reassigned
CODE 2

| | |
|---|---|
| 5-17-77 | Disclosure recieved. |
| 11-7-77 | Search requested. |
| 11-22-77 | Search completed. |
| 7-17-79 | Art sent to inventor--examples requested. |
| 8-23-79 | Asked inventor to organize presently available data and examples for evaluation. |
| 11-10-79 | Discussed with inventor and requested experimental and smoking data. |
| 12-7-79 | Inactivated. |
| 2-12-80 | Reactivated--Following meeting with inventor a memo was sent requesting specific subjective evaluations. |
| 6-13-80 | PM 834 combined herewith; new data submitted by inventor; application being prepared. |
| 8-15-80 | First draft started. |

* * * * *

bj0000016063

Source: https://www.industrydocuments.ucsf.edu/docs/tbbj0000

847 METHOD FOR APPLYING PARTICULATE MATTER TO TOBACCO
CIP

W. Nichols
New Products/Gauvin/Meyer

A method and apparatus for applying particulate matter to tobacco during the cigarette making process is disclosed. The amount of particulate matter that is lost during the cigarette making process is minimized by applying the particulate matter to the tobacco as it passes through the tongue, one of the last steps prior to enclosing the tobacco rod in the cigarette paper at a folding unit.

FILED Blish

| | |
|---|---|
| 2-9-81 | Draft application to inventor for review. |
| 3-20-81 | Draft to management for review. |
| 5-15-81 | Executed and mailed to PTO. |

* * * * *

854 TORUS INJECTION ZONE SEPARATOR

R. Thatcher, H. Odom, R. Edwards
Engineering/Tew/Kay/Pasquine

A tobacco mixture containing lighter and heavier fractions is fed into one side of a housing while an airstream flow is introduced at the other side of the housing and in an upwardly directed flow course so as to cause it to entrain the lighter fraction of the mixture therein, with the heavier fraction falling to the bottom of the housing. A suction lift is maintained at the top of the housing to increase the velocity of the lighter fraction containing air flow outwardly from the housing. The lighter fraction containing air flow is then delivered to a tangential separator unit to recover the lighter fraction. The lighter fraction can, for example, by the laminae material from which cigarette tobacco filler is made.

Sarofeen

| | |
|---|---|
| 3-78 | Disclosure received (disclosure received in March but not logged in until October because it was misplaced by Mr. Sarofeen. |
| 11-3-78 | Partial disclosure made to WLKT--still in development. |
| 5-15-79 | Copy of disclosure sent to inventors for revision. |
| 8-9-79 | Disclosure sent to WLKT for application preparation. |
| 9-24-79 | PM 841 combined herewith. |
| 11-20-79 | Final draft now in preparation. |
| 11-29-79 | Working draft of combined 841/854 received. |
| 12-1-79 | Draft sent to inventors for review. |
| 1-24-80 | Brandt is revising draft per discussions. |
| 9-4-80 | Redraft expected soon. |
| 1-15-81 | Redraft expected soon. |
| 5-18-81 | Recommend sending to F&N ASAP. |
| 6-24-81 | Being prepared to send to F&N. |

* * * * *

bj0000160 64

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

857 LASER OPTICAL SYSTEM

E. Grollimund
Engineering/Tew/Kay/Pasquine

A precision lens centering and focusing structure which comprises novel features for providing precise control and stability for a laser optical system.

Sarofeen
CODE 2

| | |
|---|---|
| 11-27-78 | Disclosure received. |
| 3-79 | Search to be done when indicated. |
| 11-19-79 | John Torrente is scheduled to complete the general laser search soon. This case may then be advanced for action once again. |
| 1-24-80 | General laser search is complete. Case will now be evaluated for disposition. |
| 3-7-80 | Disclosure sent to WLKT for application preparation. |
| 4-17-80 | Torrente visit to advance this case. |
| 6-17-80 | Discussed with Torrente. |
| 9-4-80 | Final draft being prepared. |
| 1-15-81 | Scheduled for reevaluation. |
| 5-18-81 | To be discussed with F&N. |

* * * * *

ϕ00016065

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

928 IMPROVED PROCESS FOR SYNTHESIS OF N-(HYDROCARBYL) SUBSTITUTED-p-MENTHANE-3-CARBOXAMIDE (WS-14)

R. Comes and S. Haut
Chemical Research/Sanders/Osdene

This invention provides an improved process for synthesizing carboxamides which involves reacting 3-p-menthyl halide with magnesium to form 3-p-menthylmagnesium halide Grignard reagent, and reacting the Grignard reagent with hydrocarbyl isocyanate at a temperature below about -20°C to form N-hydrocarbyl-p-menthane-3-carboxamide product. The product comprises a mixture of geometric isomers in which the 3-p-menthyl:3-p-neomenthyl weight ratio is at least 4:1 and can be as high as 9:1 under optimal conditions. This invention also provides a novel process for producing acylurea compounds such as N-(3-p-menthylcarbonyl)-N-t-butyl-N'-t-butylurea.

Related to 1005.

FILED D&O/Palmer (Hutcheson)/to be reassigned

| | |
|---|---|
| 10-22-79 | Disclosure received - inventor notified. |
| 10-31-79 | Assigned to Hutcheson. |
| 11-9-79 | Search conducted by TIF in 1978 sent to inventors for evaluation. |
| 1-25-80 | Awaiting information from possible inventor Van Auken. |
| 3-17-80 | Memo to inventors asking for any new data; 4-80 inventors indicated that data will be ready soon. |
| 6-30-80 | Inventors continue to persue this area of work; no new data available at this time. |
| 9-9-80 | Haut has indicated that they are makig some progress in controlling the synthesis to the extent that the desired isomer is obtained in improved yield. |
| 11-25-80 | Disclosure to Depaoli for application preparation. |
| 12-8-80 | Additional info received from Haut and forwarded to Depaoli. |
| 1-16-81 | Draft application received--to inventors/management for review. |
| 1-29-81 | Inventors comments received; application will be redrafted. |
| 2-20-81 | Inventors comments/corrections on draft to Depaoli. |
| 3-16-81 | Redraft received and sent to inventors/management for review. |
| 4-8-81 | Inventors have refined process and submitted new experimental data to support claims. Application is to be redrafted to incorporate significant new findings. Will be filed with PM 1005. |
| 5-28-81 | Redraft received--to inventors/management for review. |
| 6-18-81 | Executed and mailed to PTO. |

* * * * *

0000016969

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

930 DIGITAL DRY WEIGHT COMPUTER AND SENSOR CALIBRATOR

D. Phan, W. Sweeney, and J. Nghiem
Engineering/Burnley/Kay/Pasquine

Determination of the moisture of a stream of tobacco is carried out with a microprocessor calibrator which receives the incoming sensor gauge signal and converts same to a calibrated or true moisture signal, the microprocessor including a memory for storing sets of calibration data corresponding to different tobacco mixtures and access means for conditioning the memory to make available the set of data of the particular tobacco mixture in the tobacco stream.

Blish

| | |
|---|---|
| 10-31-79 | Disclosure received - inventors notified. |
| 12-79 | Assigned to Blish. |
| 2-25-80 | Inventors interviewed. |
| 4-2-80 | In-house prior art search completed--results sent to inventors. |
| 4-3-80 | Disclosure sent to WLKT for patentability evaluation and application preparation. |
| 6-24-80 | First draft completed, sent to inventors for review |
| 6-27-80 | Corrections for first draft to WLKT. |
| 7-10-80 | Redraft received--to inventors for review and more information. |
| 11-19-80 | Reminder sent to inventors concerning need for additional information. |
| 3-17-81 | Jim Kay requested to investigate status of application. |
| 6-23-81 | Inventors expect to have revised data with a month. |

* * * * *

0000016067

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

933 SPIRAL-WOUND PACKED BED BIOCATALYTIC REACTOR

H. Bravo
Biomaterials/Whidby/Farone/Lowitz

The invention involves a spiral-wound packed bed reactor consisting of a tube containing a flexible foam which may be smooth or contain indentions. On this foam are adhered segmented packets of encapsulated microorganisms which perform specific bio-chemical reactions. The encapsulated cells are segmented to facilitate and control flow rates and prevent compaction.

Palmer (Hutcheson)/to be reassigned
CODE I

| | |
|---|---|
| 11-2-79 | Disclosure received - inventor notified. |
| 12-79 | Assigned to Hutcheson. |
| 1-8-80 | Discussed with inventor and manager. Must investigate prior art before processing. |
| 2-11-80 | Inventor to organize data for disclosure. |
| 3-19-80 | Met with T. Gillis of WLKT to discuss disclosure and state of the art. |
| 7-22-80 | Memo to inventor with copy of pertinent paper for review of data and other prior art papers; memo to B. Sartor requesting state-of-the-art search on biocatalytic reactors. |
| 8-1-80 | Search results received from TPI are being assessed. Several patents, numerous papers and thesis appear to be of interest and will be ordered. |
| 1-81 | Gillis indicated that she will have some comments regarding all the cases related to immobilization shortly. |
| 4-81 | Case placed on "hold". |
| 5-18-81 | Discussed with F&N on May 26. |
| 6-29-81 | Recommend sending to F&N for application preparation. |

* * * * *

Φ00016068

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

935 MATERIALS AND METHOD FOR THE MANUFACTURE OF PELLETS (PI)

H. Bravo
Biomaterials/Whidby/Farone/Lowitz

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets, the cell or enzyme solution is reacted with celite 545 (filter aid), glutaraldehyde, and polyethyleneimine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Related to 936 and 937.

Palmer (Hutcheson)/to be reassigned
CODE 2

| | |
|---|---|
| 11-5-79 | Disclosure received - inventor notified. |
| 12-79 | Assigned to Hutcheson. |
| 1-8-80 | Discussed with inventor and manager. Must investigate prior art before processing. |
| 3-5-80 | State of the art search requested of TPI and Gillis; review papers sent to inventor for review. |
| 3-19-80 | Meeting with T. Gillis of WLKT to discuss invention and state of the art. |
| 3-21-80 | Questions on process to inventor. |
| 3-80 | Search efforts continue; TPI preliminary search completed. |
| 6-30-80 | Papers received. Will attempt to organize and prepare research report in July. |
| 7-24-80 | Search results sent to inventor and T. Gillis; have requested that Gillis determine patentability and whether to proceed with application. |
| 8-25-80 | Discussed with Gillis during her visit. Need to meet with inventor again to discuss search results. |
| 10-20-80 | Celite information to Gillis. |
| 1-81 | Gillis indicated that she will have some comments regarding all the cases related to immobilization shortly. |
| 4-81 | Case placed on "hold". |
| 5-18-81 | Discussed with F&N on May 26. |
| 6-29-81 | Recommend sending to F&N for application preparation. |

* * * * *

0000016069

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

936 MATERIALS AND METHOD FOR THE MANUFACTURE OF PELLETS (PI)

H. Bravo
Biomaterials/Whidby/Farone/Lowitz

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets, the cell or enzyme solution is reacted with celite 545 (filter aid), POLY(acrylamide acrylic acid) saturated in ethanol, and polyethylene imine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Related to 935 and 937.

Palmer (Hutcheson)/to be reassigned
CODE 2

| | |
|---|---|
| 11-5-79 | Disclosure received - inventor notified. |
| 12-79 | Assigned to Hutcheson. |
| 1-8-80 | Discussed with inventor and manager. Must investigate prior art before processing. |
| 3-5-80 | State of the art search requested of TPI and Gillis; review papers sent to inventor for review. |
| 3-19-80 | Meeting with T. Gillis of WLKT to discuss invention and state of the art. |
| 3-21-80 | Questions on provess to inventor. |
| 3-80 | Search efforts continue; TPI preliminary search completed. |
| 6-30-80 | Paper received. Will attempt to organize and prepare search report in July. |
| 7-22-80 | Search results sent to inventor and T. Gillis; have asked Gillis to assess art and determine whether application should be filed. |
| 8-25-80 | Discussed with Gillis during her visit. Plan to schedule meeting with inventor to discuss search results. |
| 10-20-80 | Celite information to Gillis. |
| 1-81 | Gillis indicated that she will have some comments regarding all the cases related to immobilization shortly. |
| 4-81 | Case placed on "hold". |
| 5-18-81 | Discussed with F&N on May 26. |
| 6-29-81 | Recommend sending to F&N for application preparation. |

* * * * *

0000016070

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

937 SAPONIFIED UNSATURATED FATTY ACIDS

H. Bravo
Biomaterials/Whidby/Farone/Lowitz

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets the cell or enzyme solution is reacted with celite 545 (filter aid); saponified unsaturated fatty acids i.e. sodium oleate, linoleic acid, linoleic acid, Joy liquid soap, White Dove liquid soap, etc. and polyethyleneimine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Related to 935 and 936.

Palmer (Hutcheson)/to be reassigned
CODE 2

| | |
|---|---|
| 11-5-79 | Disclosure received - inventor notified. |
| 12-79 | Assigned to Hutcheson. |
| 1-8-80 | Discussed with inventor and manager. Must investigate prior art before processing. |
| 3-5-80 | State of the art search requested of TPI and Gillis; review papers sent to inventor for review. |
| 3-19-80 | Meeting with T. Gillis of WLKT to discuss invention and state of the art. |
| 3-21-80 | Questions on provess to inventor. |
| 3-80 | Preliminary search completed by TPI; papers ordered. |
| 6-30-80 | Papers received. Will attempt to organize & prepare search report during July. |
| 7-22-80 | Search results sent to inventor and T. Gillis; she will determine patentability. |
| 8-25-80 | Discussed with Gillis. Will schedule meeting with inventor to discuss search results. |
| 10-20-80 | Celite information to Gillis. |
| 1-81 | Gillis indicated that she will have some comments regarding all the cases related to immobilization shortly. |
| 4-81 | Case placed on "hold". |
| 5-18-81 | Discussed with F&N on May 26. |
| 6-29-81 | Recommend sending to F&N for application preparation. |

* * * * *

0000160721

Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

939 PROCESS FOR FED-BATCH DENITRIFICATION OF TOBACCO

H. Bravo
Biomaterials/Whidby/Farone/Lowitz

A fed-batch fermentation process for reducing nitrate and nitrite content of aqueous tobacco extract is disclosed. Tobacco extract is rapidly and efficiently denitrified in accordance with the process by feeding the extract into a fermentor containing appropriate denitrifying microorganisms while providing necessary additives and maintaining conditions under which the nitrate and nitrite are reduced via a dissimilatory pathway. The denitrated extract may be applied to tobacco from which soluble solids have been extracted to form reconstituted tobacco for use in smoking products.

FILED Palmer (Hutcheson)/to be reassigned
CODE 2

| | |
|---|---|
| 11-5-79 | Disclosure received - inventor notified. |
| 12-79 | Assigned to Hutcheson. |
| 1-18-80 | Prior art search underway. |
| 2-11-80 | Inventor to organize data for disclosure. |
| 4-3-80 | Note to file advising proceeding; Farone/Lowitz concur. |
| 4-16-80 | Memo to inventor requesting specific information on process. |
| 5-80 | Preliminary examples supplied by inventor. Mr. Semp recommended waiting for formal report before preparing application. |
| 6-9-80 | PM 938 combined herewith since process is particularly useful in conjunction with Fed-Batch Denitrification; search completed and sent to inventor. |
| 7-31-80 | First revision of examples completed and sent to inventor, Whidby, and Lowitz designating specific information required to complete the examples. |
| 9-10-80 | Preliminary draft begin; awaiting response from inventor/Lowitz concerning memo of 7-31. |
| 9-22-80 | Work on first draft begun. |
| 10-7-80 | Letter from Gillis asking for meeting with inventor to obtain more information. |
| 10-9-80 | Inventor requested to organize data from pilot plant runs. |
| 10-20-80 | Analytical data to Gillis. |
| 11-21-80 | Draft application received--to inventor for review. |
| 12-16-80 | Inventor's comments on draft to WLKT. |
| 1-7-81 | Redraft received--to inventor/management for review. |
| 1-14-81 | Meeting with Farone, Whidby, Bravo, Semp & Gillis to discuss overall strategy of Fed-Batch process. Recommendation should be ready soon. |
| 2-27-81 | Corrections/comments on draft to Gillis |
| 3-17-81 | Redraft received--circulated for final review. |
| 4-13-81 | PM 865 combined herewith; awaiting comments of inventor and management. |
| 5-7-81 | Claims to F&N for review. |
| 6-18-81 | Revised claims received. |
| 6-22-81 | Executed and mailed to PTO. |

* * * * *

Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

bj0001602

## 943 RAPID REORDERING WITH AN APRON DRYER

F. King, Jr. and P. Sherman
Engineering/Burnley/Kay/Pasquine

A method and apparatus for drying tobacco and expeditiously reordering it to a desired moisture content immediately following the drying cycle. A shortened path tobacco dryer comprising a conveyor belt is made with a first stage heating section and a second stage cooling section. A third stage tobacco free fall area is provided where moisture is added on the fly after the tobacco is dropped from the belt at the end of the cooling section. The tobacco is made to fall in the form of a curtain of substantially single layered leaf or sheet through an aqueous mist where moisture is readily reabsorbed to reorder the tobacco.

Sarofeen

| | |
|---|---|
| 12-7-79 | Disclosure received--inventors notified. |
| 1-21-80 | Assigned to Sarofeen. |
| 2-80 | PM data base search completed--results to inventors for review. |
| 6-27-80 | Disclosure sent to WLKT for preparation of application. |
| 8-5-80 | Disclosure and in-house search to WLKT. |
| 9-4-80 | Discussed with Brandt; meeting set for October. |
| 10-22-80 | Request from Brandt for more information--request forwarded to Kay and inventors. |
| 12-8-80 | Additional info to Brandt. |
| 1-15-81 | Draft expected soon. |
| 5-18-81 | Sarofeen to complete WLKT draft application. |

* * * * *

## 944 PREPARATION OF MIXED MALONATE ESTERS

E. Southwick
Chemical Research/Sanders/Osdene

Malonate esters useful as monomers for the preparation of flavor release agents.

D&O/Inskeep

| | |
|---|---|
| 12-12-79 | Disclosure received--inventor notified. |
| 1-21-80 | Assigned to Inskeep. |
| 3-25-80 | Experimental work needed. |
| 9-10-80 | Polymer has been made, pyrolytic analysis in progress. |
| 1-15-81 | Inventor still attempting to make satisfactory products. |
| 4-18-81 | New information received. |
| 6-18-81 | Disclosure to D&O for application preparation. |

* * * * *

bj0001607

Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

## 946 AIR FLOW MEASURING DEVICE

R. Gaudlitz
Engineering Services/Mutter/Gannon

Related to USSN 967250

Sarofeen

| | |
|---|---|
| 1-3-80 | Disclosure received--inventor notified. |
| 1-21-80 | Assigned to Sarofeen. |
| 3-7-80 | Disclosure sent to WLKT for application preparation. |
| 9-4-80 | Impacts on a prior PM case--further consideration needed. |
| 12-1-80 | Memo to inventor requesting further data. |
| 1-15-81 | Further data received--interview with inventor needed to clarify invention. |
| 3-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | Sarofeen to send memo suggesting inactivation. |

* * * * *

## 950 APPLYING ADHESIVE TO TIPPING PAPER

F. Sherwood and T. Van Auken
Tobacco Services/Osmalov/Gannon
Physical Research/Kassman/Farone/Lowitz

Adhesive can be applied to tipping paper in a skip-tip pattern using nozzles with a steady flow. This can be achieved by either of two methods. Method A: A masking belt, with the intermittent part of the skip-tip pattern cut in it as openings, passes between a set of nozzles and the tipping paper. The masking belt is then drawn away, and a second set of nozzles completes the skip-tip pattern by applying adhesive to areas requiring an uninterrupted laydown of adhesive. Method B: The skip-tip pattern is obtained by spraying a stream of adhesive droplets through an electrical system which puts a charge on the droplets, and then deflects the droplets from the paper where dry areas are required using an electric field.

Inskeep
CODE 2

| | |
|---|---|
| 2-1-80 | Disclosure received--inventors notified. |
| 3-14-80 | Disclosure sent to WLKT for application preparation. |
| 3-19-80 | In-house search completed--results to inventors/Kothe. |
| 6-20-80 | Remarks from T.V. on search. |
| 1-14-81 | Outside search completed; questions being readied by WLKT. |
| 3-23-81 | Letter to WLKT stating that we would like to take this case off their hands unless they have a draft nearly finished. |
| 3-27-81 | Search results received. |
| 5-18-81 | Recommend sending to F&N ASAP. |

* * * * *

0000016074

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

954 CIGARETTE MAKER MOISTURE AND TEMPERATURE CONTROL

J. Remington

Object is to manipulate the dry bulb temperature and relative humidity of the air to obtain the desired moisture and temperature conditions of the tobacco in the maker.

Related to SN 111521.

Sarofeen

| | |
|---|---|
| 2-20-80 | Disclosure received. |
| 2-21-80 | Memo to Kay requesting supplemental disclosure information. |
| 2-27-80 | Kay took back disclosure to add additional information. |
| 3-31-80 | In-house search completed. |
| 4-11-80 | Meeting with Engineering to discuss follow-up details. |
| 6-27-80 | Disclosure sent to WLKT for patent application preparation. |
| 9-4-80 | Draft in final states of preparation. |
| 1-15-81 | Torrente expects to deliver application before 3-1-81. |
| 5-18-81 | For discussion with F&N. |
| 6-24-81 | This case as recently developed is of broader scope and importance and consequently the specification needs to be reworked. |

* * * * *

00001607S

Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

955 LOW DELIVERY CIGARETTES

G. Keritsis and N. Rainer
Tobacco Materials/Burns/Gannon

A carbon rod would be fabricated in the same general manner described in PM 622 with the exception that the diameter of the rod would be 8mm. The rod as a segment measuring 10 to 40mm in length would be wrapped in abutment with the tobacco column, and preferably also in abutment on its opposite end with a CA filter plug. It is conceivable, however, that in some embodiments the carbon rod might be utilized without a CA filter plug. When the coal reaches the carbon rod, it burns in a manner resembling the tobacco column, but gives no TPM of its own origin, to provide a type of controlled profile cigarette.

Related to US 4219031 and PM 990.

F&N/Blish

| | |
|---|---|
| 3-25-80 | Disclosure received--inventor notified--sent to WLKT for application preparation noting that this case should be filed promptly while PM 622 is still pending. |
| 9-11-80 | 985 combined herewith--identical disclosures. |
| 9-17-80 | 985 disclosure to WLKT. |
| 9-80 | WLKT awaiting more data--equipment for making samples not in yet. |
| 6-16-80 | Formal inquiry by N.R. about status. |
| 12-12-80 | Data for examples to WLKT] |
| 1-14-81 | Rainer says file, option to refile when machine-made results ready. |
| 3-26-81 | Letter to WLKT asking them to return this case to us for application preparation. |
| 3-27-81 | Disclosure recalled from WLKT for possible combining with 990. |
| 5-18-81 | Reassigned to Blish who will coordinate this and PM 990 with F&N. |
| 6-9-81 | Disclosure to F&N for application preparation. |

* * * * *

0000016076

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

957 ULTRALOW PRESSURE RELIEF VALVE

W. Sweeney
Engineering/Burnley/Kay/Pasquine

An ultralow pressure relief valve is disclosed. Sealing fluid is held in place by capillary forces inside a capillary tube. When pressure in the tube exceeds capillary forces, sealing fluid is forced into a reservoir, protecting the pressure gage from overpressurization.

FILED Blish

| | |
|---|---|
| 3-28-80 | Disclosure received--inventor notified. |
| 4-29-80 | Outside search requested. |
| 5-5-80 | Inventor interviewed. |
| 7-11-80 | First draft application completed--to inventor for review. |
| 10-27-80 | Inventor expects to complete draft review in several weeks. |
| 3-17-81 | Kay requested status check. |
| 3-20-81 | Drawings to drafting department |
| 4-8-81 | Final draft to management for review. |
| 5-5-81 | Final drawings to inventor for review. |
| 6-16-81 | Executed and mailed to PTO. |

* * * * *

960 FORMULATION OF A COLA-TYPE SOFT DRINK

A. Lendvay
S.D. Applications Laboratory/Assar

Phosphoric acid in the form of dry, pourable fine granules for instant beverage mixes as an acidulant and the process for preparing the same. The free flowing acidic material of this invention dissolves quickly and completely in water which may also be flavored and carbonated.

Related to 962.

Inskeep

| | |
|---|---|
| 4-8-80 | Disclosure received--inventor notified. |
| 4-80 | Assigned to Inskeep. |
| 7-14-80 | Further disclosure received. |
| 10-27-80 | First draft completed--to inventor for review. |
| 3-31-81 | Illness of inventor, other delays holding up revision. |
| 4-31-81 | Inventors comments and corrections on draft received. |
| 5-5-81 | Draft rewritten by inventor--to Assar for review. |
| 6-81 | Draft approved, awaiting final revision. |

* * * * *

D0001607?

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

962 CARBONATED INSTANT SOFT DRINK

A. Lendvay
S.D. Applications Laboratory/Assar

Related to 960.

Inskeep

| | |
|---|---|
| 4-16-80 | Disclosure received--inventor notified. |
| 5-7-80 | Questions to inventor. |
| 6-20-80 | Further disclosure received. |

* * * * *

963 WEB PERFORATING SYSTEM HAVING IMPROVED WEB GUIDE MEMBERS

D. Brookman and E. Grollimund
Engineering/Kay/Pasquine

A web perforating system wherein the web is perforated while moving over a predetermined web course and a guide member is provided for guiding the web in movement over such course, the guide member being movably mounted to permit different surface portions thereof to be juxtaposed with the web course, and cleaning means for cleaning the guide surface portions after same are moved from juxtaposition with the web course.

FILED Sarofeen

| | |
|---|---|
| 4-29-80 | Disclosure received--inventors notified. |
| 6-27-80 | Sent to WLKT for preparation of application. |
| 9-4-80 | Draft expected soon. |
| 1-15-81 | Draft expected soon. |
| 3-17-81 | First draft received--to inventors for review. |
| 3-24-81 | Inventors comments on draft received. |
| 4-3-81 | Inventors comments on draft to WLKT. |
| 4-20-81 | Redraft received. |
| 5-6-81 | Executed and mailed to PTO. |

* * * * *

0000016078

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

## 970 LOW DELIVERY CIGARETTE

L. Stewart
Cigarette Develoment/Gauvin/Meyer

A smoking article in which a tube of noncumbustible, heat fusible material is surrounded by tobacco filler and wrapper. The tube extends from approximately 5 mm from the mouth end of the filter to within approximately 10 mm of the tobacco, end by directing essentially unfiltered, undiluted smoke to the smoker during the initial puffs gives the impression of a stronger flavored cigarette. After the first several puffs, the tube is melted shut and normal dilution occurs.

Blish

| | |
|---|---|
| 5-29-80 | Disclosure received--inventor notified. |
| 6-18-80 | In-house search completed. |
| 7-24-80 | Prior art discussed with inventor; additional data requested. |
| 1-16-81 | First draft begun. |
| 5-11-81 | First draft completed. |
| 6-1-81 | First draft to inventor for review. |

* * * * *

## 972 IMPROVEMENT OF LASER PERFORATOR

E. Cashwell
Engineering/Kay/Pasquine

A single rotatable beam chopper-reflector disc is configured to separate a focused light beam into stirred sequence linear segments, then to reflect and re-direct the segments so as to utilize the total beam, or a real time scale for doing work such as perforating paper at spaced intervals positioned at discrete points selectively spaced to suit a particular intended purpose for the perforated paper such as for use as a cigarette wrapper.

Related to 974 and 984.

Sarofeen

| | |
|---|---|
| 7-7-80 | Disclosure received--inventor notified. |
| 9-4-80 | Inventor is adding to the disclosure. |
| 9-20-80 | Received additional information needed to prepare application. |
| 1-15-81 | 974 and 998 combined herewith; work on first draft begun. |
| 1-21-81 | Disclosure to WLKT for application preparation. |
| 3-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | Recommend sending to F&N ASAP. |

* * * * *

0000160079

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

983 TOBACCO STEM TREATMENT AND EXPANDED TOBACCO PRODUCT

N. Rainer and D. Siwiec
Tobacco Materials/Burns/Gannon

An improved process for expanding tobacco is disclosed wherein tobacco components such as stems, midribs and veins are contacted with an alkaline-hydrogen peroxide solution and dried and/or roasted to produce an expanded tobacco material highly suitable for use in smoking products. In a preferred approach, tobacco is treated with a hydroxide or oxide of a multivalent metal and then contacted with a solution of hydrogen peroxide; thereafter the tobacco is dried and roasted to produce an expanded tobacco product.

Related to 791, 794, 1027

FILED Palmer (Hutcheson)/to be reassigned

| | |
|---|---|
| 8-25-80 | Disclosure received--inventors notified. |
| 12-80 | Draft application being prepared. |
| 3-4-81 | Draft completed--to inventors for review. |
| 3-27-81 | Inventors comments/corrections on draft received. |
| 4-8-81 | Examples submitted by inventor Rainer. Additional examples to be completed during week of April 13. |
| 4-10-81 | Redraft completed incorporating new examples. |
| 6-9-81 | Final draft to inventors/management for review. |
| 6-22-81 | Executed and mailed to PTO. |

* * * * *

984 METHOD FOR SUBDIVIDING A BEAM

P. Martin and E. Stultz
Physical Research/Kassman/Farone/Lowitz
Engineering/Kay/Pasquine

A means of subdividing a laser beam with no loss of power. The multiple beams simultaneously perforate the paper so that the perforations do not vary in relative position as the paper oscillates in position.

Sarofeen
CODE 2

| | |
|---|---|
| 8-25-80 | Disclosure received--inventors notified |
| 3-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | To be combined with 972 and sent to F&N. |
| 6-24-81 | Being prepared to send to F&N. |

* * * * *

0000016080

Source: https://www.industrydocuments.ucsf.edu/docs/tebj0000

986 POWER METER

E. Stultz, M. Barnette, W. Smick
Engineering/Cashwell/Pasquine/Kay

Object: Power will be maintained at a given level without variation concerns due to line voltage changes, gas flow changes, and/or any fluctuations in other laser parameters including environmental conditions. Description: Use of a Power Meter output from an end mirror type to feed an electronic signal to increase or decrease laser power to a present level and thereby maintain and control laser output power. With this device a detector of holes in a web of laser perforated paper can be used to accurately control the quality and/or pressure drop of holes laser perforated into the web of paper by feeding back this signal to control the stabilized laser power.

Sarofeen

| | |
|---|---|
| 9-9-80 | Disclosure received--inventors notified. |
| 1-21-81 | Disclosure to WLKT for application preparation. |
| 3-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | Recommend sending to F&N ASAP. |
| 6-24-81 | Being prepared to send to F&N. |

* * * * *

988 OPTICAL POROSITY SYSTEM

N. Nunnally
Engineering Services/Mutter/Gannon

Dual channels of collimated light are beamed through web perforations. Photo diods are exposed to the transmitted light and provide a quality photo current proportional to a value of total porosity.

Sarofeen

| | |
|---|---|
| 9-16-80 | Disclosure received--inventor notified. |
| 11-17-80 | Compared with 929 by Blish. |
| 1-21-81 | Disclosure to WLKT for application preparation. |
| 3-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | For discussion with F&N. |
| 6-24-81 | Being prepared to send to F&N. |

* * * * *

0000016081

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

## 990 NON-COMBUSTIBLE CARBON FILTER

N. Rainer and C. McClung
Tobacco Materials/Burns/Gannon

This invention consists of a filter made from crimped paper which is pyrolyzed by passing through a heated die. This filter removes total particulate matter more efficiently than cellulose acetate filters and does not affect the gas phase as do activated charcoal filters.

Related to 955.

F&N/Blish

| | |
|---|---|
| 9-16-80 | Disclosure received--inventors notified. |
| 10-30-80 | Further information received. |
| 1-26-81 | First draft completed. |
| 3-2-81 | In-house search completed. |
| 3-25-81 | Pilot plant in 2 months to manufacture full size rod. |
| 3-26-81 | Reassigned to Inskeep for possible combining with PM 955. |
| 5-4-81 | Reassigned to Blish. |
| 6-9-81 | Disclosure to F&N for application preparation. |

* * * * *

## 991 VACUUM CONDITIONER SYSTEM

J. Davis, Jr. and H. Wilkerson
Engineering/Pasquine/Kay

A method for the measurement of moisture in samples of matter wherein a transmission means is adapted to receive the sample to be tested. A control circuit is connected shunt with transmission which circuit made sensative to the level of moisture within the sample to be tested. The invention particularly is suited to test the percentage of plasticizer in a plastic article. The control circuit is so designed that the driving point impedence is responsive to the level of moisture content in the sample.

Sarofeen

| | |
|---|---|
| 9-18-80 | Disclosure received--inventors notified. |
| 9-24-80 | Assigned to Sarofeen. |
| 1-21-81 | Disclosure to WLKT for application preparation. |
| 2-17-81 | Search results to WLKT. |
| 3-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | Sarofeen reviewing. |
| 6-24-81 | Question whether Steinbrecher is prior art? |

* * * * *

2080016082

Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

## 993 IMPROVED VIBRATORY PNEUMATIC TOBACCO FEEDER

J. Perkins
Engineering/Pasquine/Kay

A tobacco feeder consists of a conveyor belt, vibrating collecting pan, and control flaps. A metering tube delivers tobacco to the conveyor belt, the speed of which varies depending on the number of cigarette making machines in operation. The conveyor belt deposits tobacco on a vibrating collecting pan which has an inclined portion to cause the tobacco flow to increase in velocity, thereby decreasing in density, as tobacco moves down the inclined portion. The control flaps direct the flow of tobacco to vacuum tubes depending on which cigarette makers are in operation.

FILED Blish

| | |
|---|---|
| 9-18-80 | Disclosure received--inventor notified. |
| 9-24-80 | Assigned to Blish. |
| 1-19-81 | In-house search completed--to inventor for review. |
| 2-6-81 | First draft started. |
| 2-13-81 | First draft to inventor for review. |
| 3-23-81 | Redraft to inventor/management for review. |
| 6-8-81 | Executed and mailed to PTO. |

* * * * *

## 995 LASER TEMPERATURE STABILIZATION AND DEW POINT CONTROL SYSTEM

E. Grollimund
Engineering/Tew/Pasquine/Kay

A method of increasing laser power output per unit of input power by controlling and adjusting air humidity and temperature and oil temperature.

Sarofeen

| | |
|---|---|
| 9-23-80 | Disclosure received--inventor notified; assigned to Sarofeen. |
| 1-15-81 | 996 combined herewith. |
| 1-21-81 | Disclosure to WLKT for application preparation. |
| 3-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | For discussion with F&N. |

* * * * *

ϕ00016083

Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

## 1001 FILTER PLUG IMPRESSER

J. Wheless
Engineering/Tew/Pasquine/Kay

A system of filter plug transport drums carrying peripherally spaced ceramic inserts having headed wires arranged longitudinally for heat impressing grooves into filter plug surfaces. An advantage is gained in that drums of large diameter on several drums of small diameter arranged in series provide a preselected time dwell interval which allows sufficient time for exposing each plug to hot wires lon enough to make a proper impression in high production put-through.

Related to 1007; see also 1033, 1034, 1035 (FTR).

Sarofeen

| | |
|---|---|
| 11-13-80 | Disclosure received--inventor notified. |
| 1-21-81 | Disclosure to WLKT for application preparation. |
| 2-23-81 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | For discussion with F&N re Barclay situation. |
| 6-24-81 | Needs to be coordinated with other Barclay-type cases. |

* * * * *

## 1005 SYNTHESIS OF N-t-BUTYL-p-MENTHANE-3-CARBOXAMIDE

T. Van Auken
Physical Research/Kassman/Farone/Lowitz

This invention provides an efficient two-step reaction sequence for producing N-t-butyl-p-menthane-3-carboxamide. The process involves forming 3-p-menthylmagnesium halide, and reacting the 3-p-menthyl-magnesium halide with t-butyl isocyanate to form the product.

Related to 928.

FILED D&O/Palmer (Hutcheson)/to be reassigned

| | |
|---|---|
| 11-80 | Disclosure received. |
| 11-25-80 | Disclosure to Depaoli for application preparation. |
| 12-12-80 | Analytical data to Depaoli. |
| 1-13-81 | Draft received--to inventor for review. |
| 1-26-81 | Inventor/management comments received and forwarded to Depaoli. |
| 2-25-81 | References to Depaoli for consideration. |
| 3-11-81 | Redraft received--to inventor/management for review. |
| 3-27-81 | Application ready for filing--will be filed with PM 928 which is nearly completed. |
| 4-23-81 | Executed and mailed to PTO. |

* * * * *

0000016084

Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

1007 MANUFACTURE OF FLUTED PLUGS

A. Gillespie, K. Stover, and W. Sanderson
Engineering/Tew/Kay/Pasquine

The invention is the addition of a system of rollers to a filter making machine to deform an otherwise round plug into a desired shape.

Related to 1001; see also 1033, 1034, 1035 (FTR).

Sarofeen

| | |
|---|---|
| 12-10-80 | Disclosure received--inventors notified. |
| 1-21-81 | Disclosure to WLKT for application preparation. |
| 3-23-91 | WLKT instructed not to do any further work on this case. |
| 5-18-81 | For discussion with F&N re Barclay situation. |
| 6-24-81 | Needs to be coordinated with other Barclay-type cases. |

* * * * *

1016 A PROCESS FOR UTILIZING TOBACCO FINES IN MAKING RECONSTITUTED TOBACCO

G. Gellatly
Tobacco Materials/Burns/Gannon

A process for employing tobacco fines in a paper-making system for preparing reconstituted tobacco is disclosed. The tobacco fines are incorporated into the concentrated extract before the extract is recombined with the reconstituted sheet. The slurry of fines in extract is passed through a homogenizer and then is applied as a coating to the sheet instead of a spray. The further drying and shredding are done in the conventional way.

FILED Inskeep
CODE 1

| | |
|---|---|
| 2-13-81 | Disclosure received--inventor notified. |
| 4-3-81 | Second draft application to inventor for review. |
| | Draft application to management for review. |
| 6-4-81 | Executed and mailed to Depaoli for filing. |

* * * * *

0000016085



Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

1017 A PROCESS FOR UTILIZING TOBACCO FINES

G. Gellatly
Tobacco Materials/Burns/Gannon

A process for incorporating tobacco fines into strip is disclosed. The fines are combined with casing and the combination is homogenized to reduce the particle size and produce a uniform distribution. This is then sprayed by the casing applicator system onto strip; the dried product is no more dusty in subsequent cutting and handling than is strip without the added fines.

FILED Inskeep

| | |
|---|---|
| 2-13-81 | Disclosure received--inventor notified. |
| 4-7-81 | Second draft application given to inventor for review. Draft application to management for review. |
| 6-4-81 | Executed and mailed to Depaoli for filing. |

* * * * *

1018 A MECHANICAL TOBACCO PROCESSOR

I. Uydess
Biomaterials/Whidby/Farone/Lowitz

A mechanized tobacco processor for the preconditioning, infiltration, heating and/or "expansion" of tobacco under constant temperature, RH, etc. within a closed circular "tower" similar in configuration to a "cyclotron."

Inskeep
CODE I

| | |
|---|---|
| 2-19-81 | Disclosure received--inventor notified. |
| 2-25-81 | Disclosure to WLKT for application preparation. |
| 5-18-81 | Recommend sending to F&N ASAP. |

* * * * *

0000016086

Source: https://www.industrydocuments.ucsf.edu/docs/tebj0000

## 1019 FLAVOR-RELEASE BETA-HYDROXY-ESTER COMPOSITIONS

H. Grubbs and Y. Houminer
Chemical Research/Sanders/Osdene

This invention provides tobacco and non-tobacco smoking compositions which contain a hydroxy-substituted carboxylate compound as a flavorant additive.

Related to 920 and 964.

FILED D&O/Palmer (Hutcheson)/to be reassigned

| | |
|---|---|
| 2-9-81 | Examples to Depaoli for consideration. |
| 2-19-81 | Letter from Depaoli--proceeding with application. |
| 3-6-81 | Draft received--to inventors/management for review. |
| 3-25-81 | Comments/corrections for draft sent to Depaoli. |
| 4-24-81 | Draft application to inventors for review. |
| 4-27-81 | Executed and mailed to Depaoli for filing. |

* * * * *

## 1030 ACETYL-PYRAZINE FLAVORANTS

D. Williams, Y. Houminer, and R. Southwick
Chemical Research/Sanders/Osdene

This invention relates to a novel process for preparing heretofore unknown ketones having desirable odor and flavor properties.

D&O/Palmer (Hutcheson)/to be reassigned

| | |
|---|---|
| 3-13-81 | Disclosure received--inventors notified. |
| 3-27-81 | Disclosure typed and sent to inventors and manager for review. |
| 4-9-81 | Corrections made and disclosure and search results sent to Depaoli for application preparation. |
| 6-9-81 | Additional information to Depaoli. |
| 6-18-81 | Application is being prepared based on pyrazine synthesis only; CIP possible at later date. |

* * * * *

0000016087

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

1038 EXPANSION OF TOBACCO UTILIZING TREATMENT WITH WATER OR STEAM

G. Keritsus and H. Sun
Tobacco Materials/Burns/Gannon

A process is disclosed for increasing the cylinder volume of unimpregnated tobacco lamina filler by introducing the filler into contact with a gaseous medium, at elevated temperature and at atmospheric pressure, at a rate which is effective to provide a substantially niform and substantially constant rate of heat transfer from the gaseous medium to the filler and for a total contact time with the gaseous medium which is sufficient to expand the filler. The filler has an OV value, immediately before treatment, within the range of from about 5 to 20% and the gaseous medium comprises at least about 65% steam and is at a temperature of at least about 450°F.

F&N/Inskeep

| | |
|---|---|
| 4-28-81 | Disclosure received--inventor notified. |
| 6-10-81 | R. Shaw of F&N here to interview inventors--he will prepare application. |
| 6-17-81 | Additional info and refs to F&N; draft application being sent. |
| 6-24-81 | First draft received--to inventors for review. Additional background info to F&N. |
| 6-29-81 | Redraft received--to inventors for review. |

* * * * *

1039 CONSTANT MOISTURE HEAT TREATMENT

J. Banyasz, C. Lilly, P. Martin, H. Merritt, C. Owens

Physical Research/Kassman/Farone/Lowitz

F&N/Inskeep
CODE 2

| | |
|---|---|
| 4-28-81 | Disclosure received--inventor notified. |
| 6-10-81 | R. Shaw of F&N here to interview inventors--he will prepare application. |
| 6-30-81 | Background information on pending US expansion cases to F&N. |

* * * * *

0000016088

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000

1040 THE USE OF SUGARS AND CONTROLLED MOISTURE PROFILES IN THE HEAT TREATMENT OF TOBACCO

J. Banyasz, C. Lilly, P. Martin, B. Semp, H. Merritt, C. Owens

Physical Research/Kassman/Farone/Lowitz

F&N/Inskeep
CODE I

| | |
|---|---|
| 4-28-81 | Disclosure received--inventor notified. |
| 6-10-81 | R. Shaw of F&N here to interview inventors--he will prepare application. |
| 6-30-81 | Background information on pending US expansion cases to F&N. |

* * * * *

1045 AUTOGENOUS FERMENTATION--PARK 500

B. Semp
Biomaterials/Whidby/Farone/Lowitz

This disclosure related to denitrification of tobacco extracts using naturally occurring thermophilic organisms discovered in feeder tanks at Park 500.

F&N/Palmer (Hutcheson)/to be reassigned
CODE I

| | |
|---|---|
| 5-13-81 | Disclosure received--inventor notified. |
| 5-27-81 | Inventor met with Haley of F&N--additional data requested from inventor. F&N will prepare application. |
| 6-19-81 | Additional background information to F&N. |

* * * * *

1047 PROCESS FOR DENITRIFICATION OF TOBACCO EXTRACTS AND MICROORGANISMS USED THEREIN

V. Malik
Biomaterials/Whidby/Farone/Lowitz

This disclosure relates to improvements and more recent work related to denitrification of tobacco extracts using purified cultures of thermophilis isolated at Park 500. Characterization of microorganisms may result in additional coverage.

F&N/Haley/Palmer (Hutcheson)/to be reassigned

| | |
|---|---|
| 5-27-81 | Inventor met with Haley of F&N--additional data requested from inventor. F&N will prepare application. |
| 6-19-81 | Additional background information to F&N. |

* * * * *

680016089



Source: https://www.industrydocuments.ucsf.edu/docs/sbj0000

1053 METHOD FOR DENITRIFICATION OF TOBACCO EXTRACTS

E. Bravo
Biomaterials/Whidby/Farone/Lowitz

Tobacco extracts are denitrified by naturally occurring thermophilic organisms in continuous and/or fed-batch mode.

Palmer/Unassigned
CODE I

| | |
|---|---|
| 5-27-81 | Inventor met with Haley of F&N; disclosure and experimental data requested. |
| 6-29-81 | Disclosure received--inventor notified. |

* * * * *

0000016090

Source: https://www.industrydocuments.ucsf.edu/docs/tcbj0000

T S OSDENF
JUL 2 1981

0000016091

Source: https://www.industrydocuments.ucsf.edu/docs/tsbj0000